MINISTERIAL COUNCIL ON EDUCATION,
EMPLOYMENT, TRAINING AND YOUTH AFFAIRS

NUMERACY
NON-CALCULATOR

YEAR
7
2008
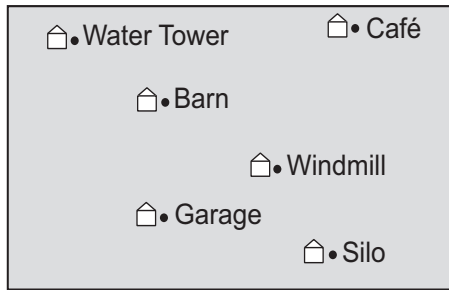
0:40 **SESSION 1**
Time available for students to complete
test: 40 minutes

Use 2B or HB
pencil **only**

YEAR 7 NUMERACY

1 This map shows the position of some of the buildings in the town of Bendy.

⌂•Water Tower   ⌂• Café   **N**
⌂•Barn
⌂• Windmill
⌂• Garage
⌂•Silo

Which building is West of the Windmill and North of the Barn?

Silo	Café	Garage	Water Tower
⬭	⬭	⬭	⬭

2

14:30

Which time is the same as the time shown on this digital clock?

2:30 am	2:30 pm	4:30 am	4:30 pm
⬭	⬭	⬭	⬭

3 Another way of writing 6^2 is

6×2	6×6	$6 + 6$	$2 \times 2 \times 2 \times 2 \times 2 \times 2$
⬭	⬭	⬭	⬭

4 A square-based pyramid and a cube have been glued together.
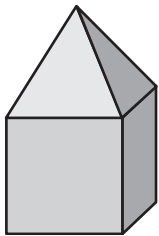
How many **faces** does the new object have?

4	8	9	11
⬭	⬭	⬭	⬭

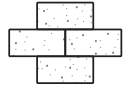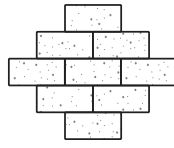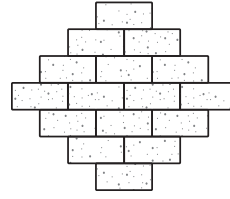**5** Jen is making this brick pattern.

Shape 1   Shape 2   Shape 3   Shape 4

This table shows the number of bricks she needs for each shape in her pattern.

Shape	1	2	3	4	5
Number of bricks	1	4	9	16	?

How many bricks are needed for Shape 5?

24	25	29	30
◯	◯	◯	◯

6 Which dotted line is a line of symmetry?

◯	◯	◯	◯
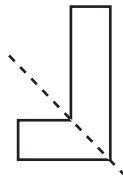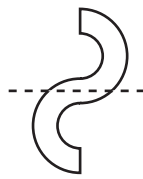
7 What is $10 as a percentage of $40?
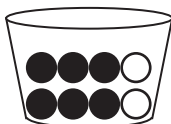
4%	10%	25%	40%
◯	◯	◯	◯

8 Lee takes one ball out of his bucket without looking.

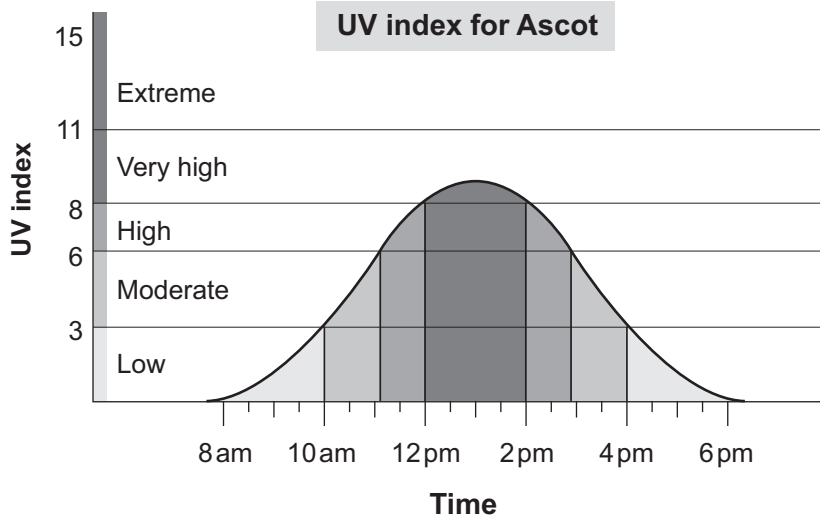It is very likely, but not certain, that he will get a **black** ball.

Which is Lee's bucket?

◯	◯	◯	◯

9 This graph shows the UV index for the town of Ascot during one day.

UV index for Ascot

15

Extreme

11

Very high

8

High

6

Moderate

3

Low

UV index

8 am   10 am   12 pm   2 pm   4 pm   6 pm

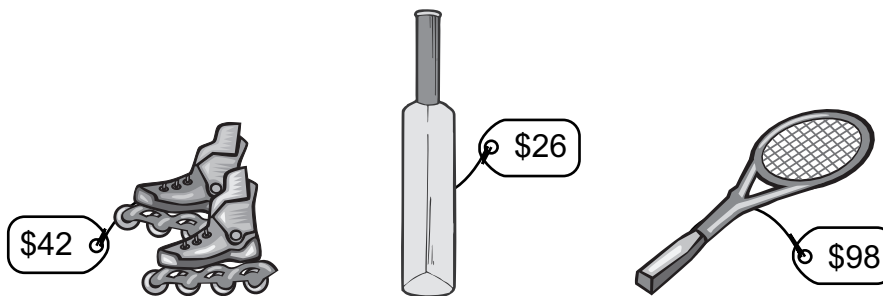**Time**

When was the UV index always in the low range?

◯   between 8 am and 6 pm
◯   before 10 am and after 4 pm
◯   before 10 am only
◯   after 4 pm only

10 What is the missing number?

$$4 \times \boxed{} = 8 \times 3$$
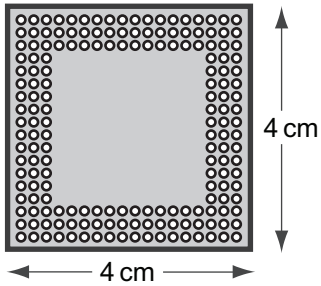
11

$42 $26 $98

What is the best way to estimate the total cost of these three objects?

◯ $40 + $20 + $90
◯ $40 + $20 + $100
◯ $40 + $30 + $90
◯ $40 + $30 + $100

12 A computer chip has dimensions 8 mm × 8 mm.
A scale drawing is shown below.

4 cm

4 cm

What scale is used in the drawing?

◯   1 cm represents 5 mm

◯   1 cm represents 2 mm

◯   2 cm represents 1 mm

◯   5 cm represents 1 mm
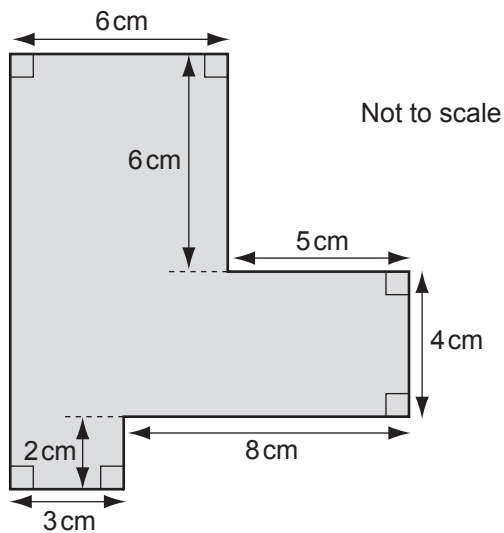
13 Which number is greater than 0.08?

0.1	0.009	0.07	0.0089
◯	◯	◯	◯

14

6 cm

6 cm

Not to scale

5 cm

4 cm

2 cm

8 cm

3 cm

What is the perimeter of this shape?

34 cm	36 cm	46 cm	74 cm
◯	◯	◯	◯

15 John is using this pancake recipe.

Pancake recipe *Makes 8 pancakes*
Ingredients
1 cup flour
2 eggs
1 cup milk
$\frac{1}{2}$ cup sugar
20g butter

How many cups of sugar are needed for 40 pancakes?

$2\frac{1}{2}$ ○   4 ○   5 ○   20 ○

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16 There are 50 marbles in a bag. Ten marbles are red, the others are black.
Emma picks a marble from the bag without looking.
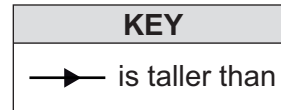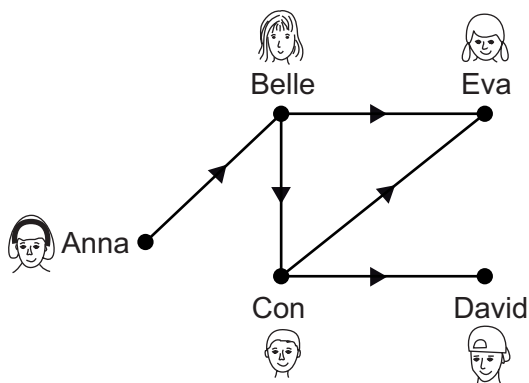
What is the chance of her picking a **red** marble?

1 in 10 ○   2 in 10 ○   4 in 10 ○   5 in 10 ○

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17 Five students compared their heights.
This diagram shows their results.

KEY
──► is taller than

Which student is the tallest?

Anna ○   Belle ○   Con ○   David ○   Eva ○

18 This is a movie program.
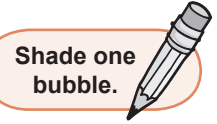
PROGRAM		
Movie	**Start time**	**Length**
Blue Sky	10:00 am, 12:30 pm, 3:30 pm	1 hour 37 mins
Fuzzy Dog	3:00 pm, 7:00 pm	2 hours
The King	11:00 am, 2:15 pm, 6:00 pm	1 hour 40 mins
Kids at School	2:05 pm, 5:00 pm	2 hours 30 mins

Gina arrives at the movie theatre at 2:00 pm. Her mother will pick her up at 4:00 pm.

Which movie could Gina watch from start to finish?

Blue Sky Fuzzy Dog The King Kids at School

◯ ◯ ◯ ◯

19 Which fraction has the same value as $2\frac{3}{4}$?

$\frac{8}{4}$ $\frac{9}{4}$ $\frac{11}{4}$ $\frac{14}{4}$

◯ ◯ ◯ ◯
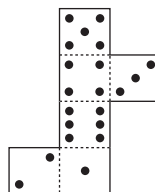
20 Here is a standard die.

The sum of the dots on opposite faces is 7.

Which is the net of this die?

◯ ◯ ◯ ◯

21
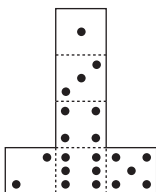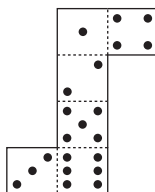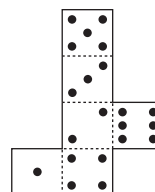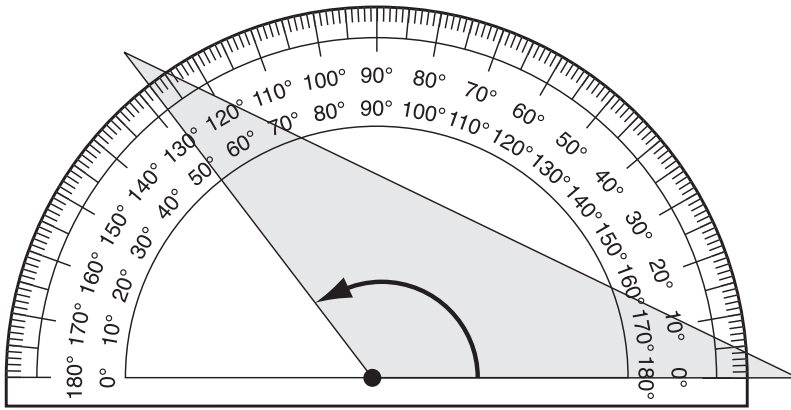
What is the size of the angle in the shaded triangle marked by the arrow?

[   ] degrees

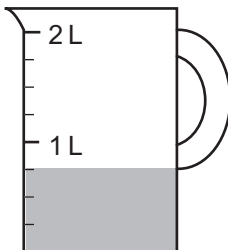**22** This table shows the results of a survey on mobile phone bills.

Monthly bill

Age	$20 or less	Greater than $20 and less than $30	$30 or more
Under 20	12	28	18
20 – 40	8	14	13
Over 40	15	17	12

In total, how many people under the age of 20 had a monthly bill of **less than $30**?

[   ] people

23 This jug has some milk in it.

If Eve adds an extra 500 mL of milk to the jug, how many millilitres (mL) of milk will then be in the jug?

[   ] mL

24 Ann recorded the colour of 50 cars in this table.

Write your answer in the box.

Car colour	Number of cars
White	25
Blue	4
Yellow	5
Red	?
TOTAL	**50**

What percentage of the cars is red? [ ] %

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25 A garden centre sells a potting mix made up of soil, compost and sand.

Soil makes up $\frac{2}{3}$ of the mix and compost makes up $\frac{1}{4}$ of the mix.

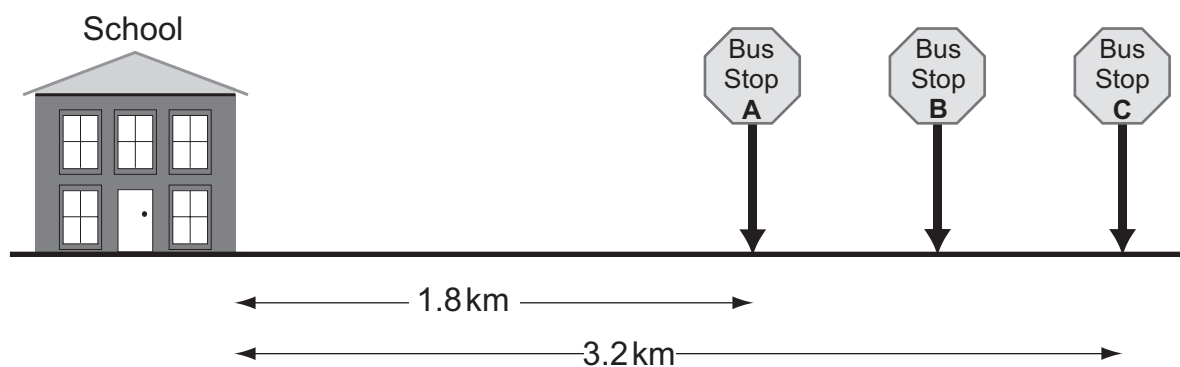What fraction of the potting mix is sand?

Shade one bubble.

$\frac{1}{12}$ ○ $\frac{3}{7}$ ○ $\frac{5}{12}$ ○ $\frac{4}{7}$ ○

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26 This picture shows the position of three bus stops on the road leading to a school.

Write your answer in the box.

Bus Stop B is **exactly halfway** between Bus Stop A and Bus Stop C.

Not to scale

School

Bus Stop A   Bus Stop B   Bus Stop C

←— 1.8 km —→

←————— 3.2 km —————→
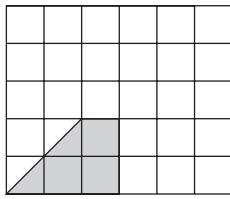
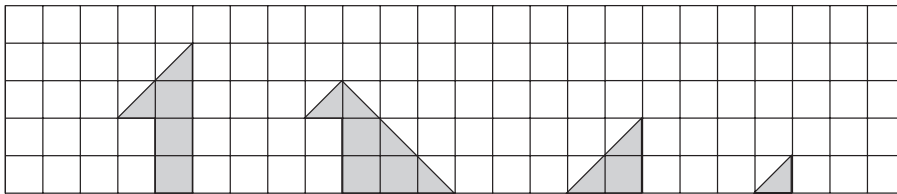What is the distance between the **School** and **Bus Stop B**? [ ] km

27 Tara drew this shape on square grid paper.

Which one of the shapes below, when joined (with no overlap) with Tara's shape, will **not** make a right-angled triangle?

○   ○   ○   ○
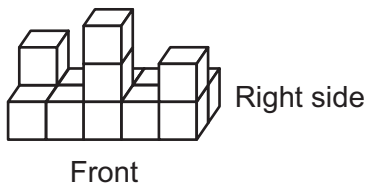
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28 What is the answer to 6.6 ÷ 0.3?
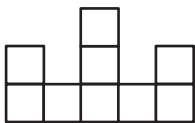
0.022   0.22   2.2   22

○   ○   ○   ○
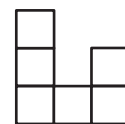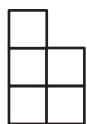
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29 This object was made using identical cubes.

Right side

Front

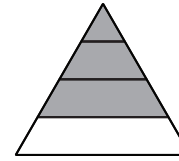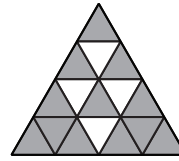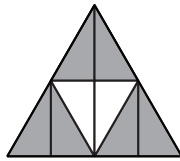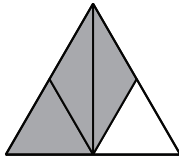This is a drawing of the view from the front.

Front view

Which drawing shows the view from the right side?

○   ○   ○   ○

30 Which diagram does **not** have $\frac{3}{4}$ of the area shaded?

Shade one bubble.

○   ○   ○   ○

31 Ben puts 7 flowers in each of 8 vases.
He has 3 flowers left over.
Ben wants to put 9 flowers in each vase.

Write your answer in the box.

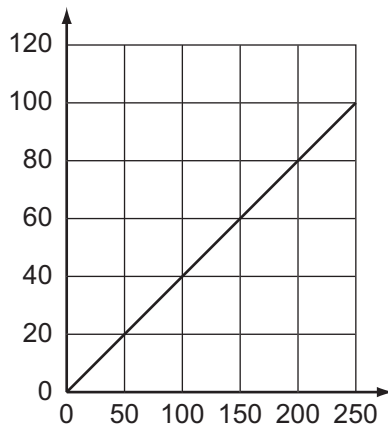How many **more** flowers does he need? ☐ flowers

32 Alex uses these two conversion graphs.
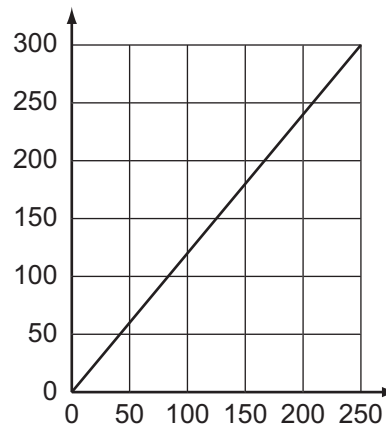

Australian dollars to British pounds

Australian dollars to Brunei dollars

How many Brunei dollars are equal in value to 50 British pounds?

☐ Brunei dollars

END OF TEST

YEAR 7 NUMERACY PRACTICE QUESTIONS

P1 How many dolphins are shown on this card?

3	4	5	6
◯	◯	◯	◯

P2

6 + 4 = ☐
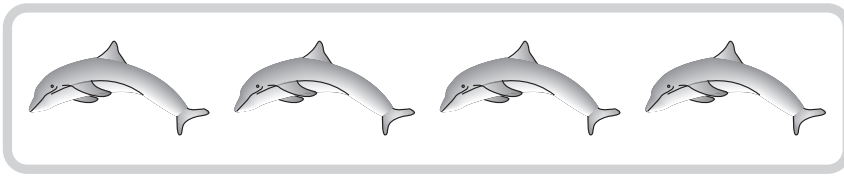
P3 What is the total cost of these two stamps?

$1.50 $2.00

$ ☐